

REMARKS

Please reconsider the application in view of the above amendments and the following remarks.

Disposition of Claims

Claims 1-65 remain pending. Claims 1, 16, 30, 45 and 59 are independent claims. The remaining claims depend directly or indirectly from claims 1, 16, 30, 45 and 59. Applicant has amended claims 1, 16, 30, 45 and 59 herein to capture additional subject matter, clarify the scope of the invention and/or correct minor errors. No new matter has been added by way of these amendments.

Rejection(s) under 35 U.S.C. § 102

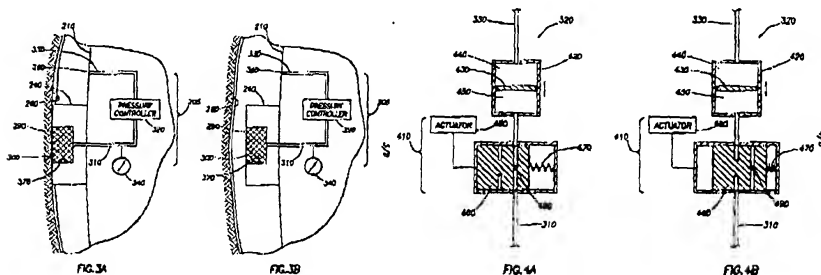
The Examiner rejected claims 1, 2, 8-14, 16, 22-28, 30, 32, 37-42, 44-48 and 59 under 35 U.S.C. § 102(e) as being anticipated by Meister et al. Applicant respectfully traverses the rejection.

Applicant's Claim 1 recites "An apparatus for measuring downhole pressures...comprising...pressure equalizing mechanism capable of selectively equalizing an internal pressure of the apparatus with one of the annular pressure and the pore pressure". Applicant's Claim 16 recites "an apparatus for measuring downhole pressures...comprising...a control valve capable of selectively connecting the first and second passage whereby, an internal pressure in the first fluid passage is equalized to one of the annular pressure and the pore pressure." Claim 30 recites "a downhole drilling tool capable of measuring downhole pressures during a drilling operation...comprising...pressure mechanism capable of selectively equalizing

an internal pressure of the drill collar with one of the annular pressure and the pore pressure."

Claim 45 now recites "A method of measuring downhole pressures during a drilling operation...comprising...selectively equalizing an internal pressure of the downhole drilling tool with one of the annular pressure of the wellbore and the pore pressure of the subterranean formation." Claim 59 now recites "A method of equalizing an internal pressure of a downhole drilling tool comprising:...selectively equalizing pressure between the wellbore cavity and a measurement cavity via a cylinder, the cylinder having a piston therein defining a fluid chamber and a buffer chamber, the wellbore cavity in fluid communication with a wellbore chamber, the buffer chamber in selective fluid communication with the measurement cavity."

The selective equalization recited in the Applicant's claims is described, for example, at paragraphs 0053-0055 of the specification. Examples of selective equalization are depicted for pore pressure in Figures 3A and 4B and for annular pressure in Figures 3B and 4A shown below:



A gauge is provided to measure the internal pressure.

None of the art of record teaches, discloses or even suggests such selective equalization as claimed. As shown below, Meister, the primary reference, teaches a port 246 located on a pad 220 exposed to formation fluid 216:

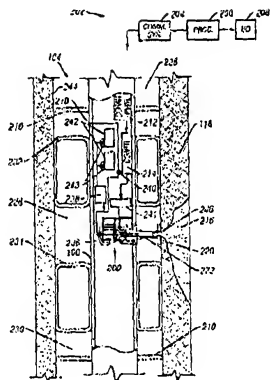


FIG. 2

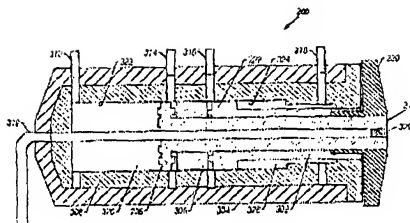


FIG. 3

Formation fluid is drawn into the port 246 by a draw piston 236. *See Meister at paragraph 0034.* There is no disclosure in Meister for selectively equalizing internal pressure with one of the annular and pore pressure as recited in Applicant's claims.

On pages 3 and 5 of the Office Action, the Examiner indicates that the gauge is in contact with the annulus 228, filled with formation fluid and registers the formation pressure which is also annulus pressure. As described in Applicant's spec at paragraph 0002, the annular pressure is the wellbore pressure, and the fluid in the formation is pore pressure. The intermediate portion 228 of the wellbore that is isolated by packers is initially at annular pressure, but is then lowered below formation pressure to draw fluid into the port. *See, e.g., Meister at paragraph 0034 and 0051.* The remainder of the wellbore outside of intermediate portion 228 remains at annular pressure. Meister fails to describe any type of selective equalization to the annular pressure.

As noted by the Examiner on page 2 of the Office Action, Meister indicates that hydraulic reservoirs are balanced to hydrostatic pressure of the annulus for consistent operation. *See, Meister at paragraph 0036.* However, this hydrostatic pressure is used solely to apply

pressure to activate the piston so that it may extend and retract (*See Meister at paragraph 0041*), not for selectively equalization as recited in any of Applicant's claims.

In view of the above, Applicant submits that Meister fails to anticipate or render obvious any of Applicant's claims. For at least these reasons, Applicant respectfully requests withdrawal of the rejection of Applicant's Claims under 35 U.S.C. § 102 and requests allowance of such claims.

Rejection(s) under 35 U.S.C. § 103(a)

The Examiner rejected claims 3-7, 17-21, 32-36, 49 and 60 under 35 U.S.C. 103 as being unpatentable over Meister as applied to claim 2, above, in view of Hancock. Claims 15, 29, 50-58 and 61-65 were rejected under 35 U.S.C. § 103 as being unpatentable over Meister. Applicant respectfully traverses the rejection.

For the reasons set forth above with respect to the 102 rejection, Meister fails to teach, disclose or even suggest, *inter alia*, selective equalization as recited in Applicant's claims. The deficiencies of Meister are not provided by Hancock. Hancock teaches a transducer for converting fluid pressure into pneumatic pressure for a relay to a remote readout station. Hancock fails to even disclose annular pressure or any equalization or connection therewith.

In view of the above, Applicant respectfully submits that none of the art of record (alone or in combination) teaches, discloses or even suggests the invention as recited in each of Applicant's claims. Applicant further submits that all of the pending claims are in condition for allowance. Withdrawal of the rejections and passage to issuance is respectfully requested.

Applicant believes this reply to be fully responsive to all outstanding issues and place this application in condition for allowance. If this belief is incorrect, or other issues arise, do not

hesitate to contact the undersigned at the below listed telephone number. Please apply these charges or any credits, to Deposit Account 19-0610 (Reference Number 20.2792).

Date:

11/6/03

Respectfully submitted,

Jennie J.L. Salazar, Reg. No. 45,065
Schlumberger Technology Corporation
200 Gillingham Lane, MD 9
Sugar Land, TX 77478

Telephone: (281) 285-8809
Facsimile: (281) 285-8821

FAX RECEIVED

NOV 07 2003